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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the prior application:

1. - 12. Canceled.
13. (previously presented) The reagent of claim 60 having a physical density of about 1.01 g/cm³ to 1.14 g/cm³.
14. (previously presented) The reagent of claim 60 having a density of about 1.14 g/cm³.
15. (previously presented) The reagent of claim 60 wherein the optical density of the composition is at least about 15 at a visible wavelength of maximal tracer absorbance.
16. (previously presented) The reagent of claim 60 wherein the optical density of the composition is about 200 - 400 at a visible wavelength of maximal tracer absorbance.
- 17.-19. Canceled.
20. (previously presented) The reagent of claim 60 wherein the polymerase is Taq polymerase.
- 21.- 41. Canceled.
42. (previously presented) An aqueous reagent for an *ex-vivo* polymerase reaction in which a nucleic acid polymer product complementary to a nucleic acid polymer template is prepared, the reagent comprising Taq DNA polymerase and a

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anionic tracer dye unbound to primer or nucleotides which visually has a red appearance and a peak visible absorbance wavelength at between 430 and 617 nm and a solute to increase the physical density of the reagent, the reagent having an optical density of about 5 to about 500 and being free of the primer and the nucleic acid polymer template and having a physical density of at least about 1.01 g/cm³, but less than the density of the solute.

43. (previously presented) The reagent of 42 wherein the reagent has a density of about 1.14 g/cm³.

44. (previously presented) The reagent of 43 wherein the solute comprises glycerol, trimethylglycine or a sugar.

45. (previously presented) The reagent of 42 wherein the solute comprises glycerol, trimethylglycine or a sugar.

46. (previously presented) The reagent of 43 wherein the solute comprises glycerol.

47. (previously presented) The reagent of 42 wherein the solute comprises glycerol.

48. (previously presented) An aqueous reagent for an *ex-vivo* polymerase reaction in which a nucleic acid polymer product complementary to a nucleic acid polymer template is prepared, the reagent comprising Taq DNA polymerase, an anionic tracer dye unbound to primer or nucleotides consisting essentially of acid red 1 and acid violet 5, and a solute to increase the physical density of the reagent, the reagent having an optical density of about 5 to about 500 at a visible wavelength of maximal tracer absorbance, being free of the primer and the nucleic acid polymer template, and having a physical density of at least about 1.01 g/cm³, but less than the density of the solute.

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49. (previously presented) The reagent of 48 wherein the reagent has a density of about 1.14 g/cm^3 .

50. (previously presented) The reagent of 49 wherein the solute comprises glycerol, trimethylglycine or a sugar.

51. (previously presented) The reagent of 48 wherein the solute comprises glycerol, trimethylglycine or a sugar.

52. (previously presented) The reagent of 49 wherein the solute comprises glycerol.

53. (previously presented) The reagent of 48 wherein the solute comprises glycerol.

54. – 59. Cancel.

60. (currently amended) An aqueous reagent for use in forming a polymerase reaction mixture comprising a thermostable DNA polymerase, a nucleic acid polymer template, a primer, nucleotides, a detectible anionic tracer dye unbound to primer or nucleotides, and a solute to increase the physical density of the reagent, the reagent comprising the thermostable DNA polymerase, the detectible anionic tracer dye, and the solute but being substantially free of the primer and the nucleic acid polymer template, the reagent having an optical density of about 5 to about 500 at a visible wavelength of maximal tracer absorbance and a physical density of at least about 1.01 gm/cm^3 , but less than the density of the solute.

61. (previously presented) The reagent of claim 60 wherein the thermostable DNA polymerase is Taq and the concentration of Taq in the reagent is 0.033 to 10 units/ μl .

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62. (previously presented) The reagent of claim 60 wherein the thermostable DNA polymerase is Taq and the concentration of Taq in the reagent is 0.06 to 5 units/ μ l.

63. (previously presented) The reagent of claim 60 wherein the thermostable DNA polymerase is Taq and the concentration of Taq in the reagent is about 1 unit/ μ l.

64. (previously presented) The reagent of claim 20, wherein the solute is sugar, trimethylglycine, or glycerol.

65. (previously presented) The reagent of claim 20, wherein the solute is glycerol.

66. (new) An aqueous reagent for use in forming a polymerase reaction mixture comprising a thermostable DNA polymerase, a nucleic acid polymer template, a primer, nucleotides, a detectible anionic tracer dye unbound to primer or nucleotides, and a solute to increase the physical density of the reagent, the reagent comprising the thermostable DNA polymerase, the detectible anionic tracer dye **wherein the tracer dye comprises acid violet 5 and acid red 1**, and the ^{reagent} ~~solute~~ but being free of the primer and the nucleic acid polymer template, ~~the reagent~~ having an optical density of about 5 to about 500 at a visible wavelength of maximal tracer absorbance and a physical density of at least about 1.01 gm/cm³, but less than the density of the solute.

67. (new) The reagent of claim 66 wherein the thermostable DNA polymerase is Taq polymerase.

68. (new) The reagent of claim 66 wherein the thermostable DNA polymerase is Taq and the concentration of Taq in the reagent is 0.033 to 10 units/ μ l.

What is free -
the primer, but not
salt?
Consider a wherein
sol - of reagent...

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69. (new) The reagent of claim 66 wherein the thermostable DNA polymerase is Taq and the concentration of Taq in the reagent is 0.06 to 5 units/ μ l.

70. (new) The reagent of claim 66 wherein the thermostable DNA polymerase is Taq and the concentration of Taq in the reagent is about 1 unit/ μ l.

71. (new) The reagent of claim 67, wherein the solute is sugar, trimethylglycine, or glycerol.

72. (new) The reagent of claim 67, wherein the solute is glycerol.

73. (new) An aqueous reagent for use in forming a polymerase reaction mixture comprising a thermostable DNA polymerase, a nucleic acid polymer template, a primer, nucleotides, a detectible anionic tracer dye unbound to primer or nucleotides, and a solute to increase the physical density of the reagent, the reagent comprising Taq polymerase, the detectible anionic tracer dye **consisting of 20% acid violet 5 and 80% acid red 1**, and the solute but being free of the primer and the nucleic acid polymer template, the reagent having an optical density of about 200 to about 400 at a visible wavelength of maximal tracer absorbance and a physical density of at least about 1.01 gm/cm³, but less than the density of the solute.

74. (new) The reagent of claim 73 wherein the thermostable DNA polymerase is Taq polymerase.

75. (new) The reagent of claim 73 wherein the thermostable DNA polymerase is Taq and the concentration of Taq in the reagent is 0.033 to 10 units/ μ l.

76. (new) The reagent of claim 73 wherein the thermostable DNA polymerase is Taq and the concentration of Taq in the reagent is 0.06 to 5 units/ μ l.

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77. (new) The reagent of claim 73 wherein the thermostable DNA polymerase is Taq and the concentration of Taq in the reagent is about 1 unit/ μ l.

78. (new) The reagent of claim 74, wherein the solute is sugar, trimethylglycine, or glycerol.

79. (new) The reagent of claim 74, wherein the solute is glycerol.

80. (new) The reagent of 42 wherein the reagent has a peak visible absorbance wavelength at between ~~about~~ 500 and 535.

81. (new) The reagent of 80 wherein the reagent has a density of about 1.14 g/cm³.

82. (new) The reagent of 81 wherein the solute comprises glycerol, trimethylglycine or a sugar.

83. (new) The reagent of 82 wherein the solute comprises glycerol.